Freemium to Premium: Monetizing with PayPal

Matt Cole

WordPress is used on 14.9% of the top 1 million websites, making it the most popular content management system in use on the internet today. See how to turn your WordPress content into dollars using PayPal.

XDevCamp

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PAYPAL DIGITAL GOODS SUBSCRIPTIONS

SETUP AND CONFIGURATION

This lab requires that you have the following software installed:

- XAMPP (version 1.7 or better), or an equivalent combination of Apache, PHP, and MySQL
- WordPress (version 3.2 or better)
- Your favorite text editor, such as Notepad++, Komodo Edit, Emacs, or vi

Throughout this document, the following styles are used to simplify instructions:

- Folder names, file names, menu items, and field prompts are formatted in **bold**.
- Code snippets/samples, function names, and names of API calls are always in `monotype`.
- Literal text that you need to enter is always in **`monotype and bold`**.
- Literal text that you need to remove is always in ~~`monotype and strikethrough`~~.
- The ellipsis (…) indicates additional text or code that is not shown.
- Screenshots are formatted with a glowing border.
- Special notes, such as this one, are enclosed in boxes.

You should have a copy of the paypal-dg-subscriptions.zip file on your desktop. This file does not need to be expanded.

WINDOWS XAMPP USERS

You will need to enable cURL support in PHP before beginning. To do this:

1. Locate the folder where you installed XAMPP (this will usually be **C:\xampp**).
2. Open the **php** folder.
3. Open **php.ini** with your text editor.
4. Locate the following line and remove the semicolon from the beginning of the line to uncomment it:
   ```
   ;extension=php_curl.dll
   ```
5. Save the file.
6. Restart Apache through the XAMPP Control Panel.

ABOUT THIS LAB

This lab demonstrates how to create a plugin for WordPress that allows you to restrict certain content so that it is visible only to paying members. WordPress is a popular, open source blogging and content management system, built on the open source PHP and MySQL platforms. It is used by 14.9% of the top 1 million websites[1], making it the most popular content management software in use on the internet today.

Before you start this lab, you will be expected to have Wordpress installed. No more than a basic installation is needed. If you do not have WordPress installed, an additional handout will be provided to you with instructions on how to install it – refer to that handout before starting this lab.

You will be provided with the shell of the plugin; the shell allows you to restrict content, but it does not provide any sort of payment processing. During the course of the lab, you will build up the plugin to add in this missing functionality, using PayPal's Digital Goods checkout experience to collect payments from your buyers. While this plugin will not cover every conceivable scenario, it is intended to give you a foundation upon which you can build additional functionality later.

ABOUT MATT COLE

Matt Cole has been tinkering with computers for as long as he can remember. In fourth grade, he found a book of BASIC games laying around the basement. It intrigued him, so one day he took it to school and started entering them into the school's Apple II's computers. He hasn't stopped programming since – adding Pascal, C++, Visual Basic, Visual C#, PHP, and SQL to his repertoire. Matt joined PayPal in 2009 as an Integration Engineer, working with merchants of all sizes to integrate PayPal's products into their solutions.

[1] According to w3techs.com, as of September 25, 2011. Source: http://w3techs.com/technologies/overview/content_management/all

LAB 1 – INSTALL THE PLUGIN AND ADD PAYPAL-SPECIFIC FIELDS TO THE PLUGIN'S CONFIGURATION

CREATE A NEW CATEGORY TO REPRESENT YOUR PREMIUM CONTENT.

1. Open your WordPress admin.
2. Under the **Posts** section, click **Categories**.
3. In the **Name** box, enter **Premium Content**.
4. Click **Add New Category**.

INSTALL THE PREMIUM CONTENT PLUGIN.

WINDOWS/LINUX USERS

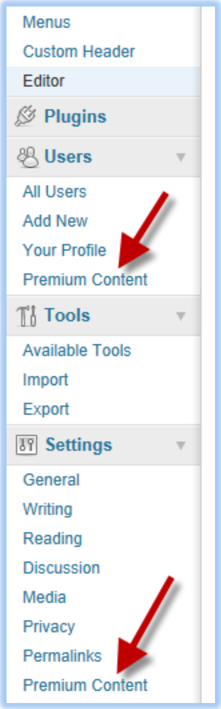
1. Open your WordPress admin.
2. On the left-hand side of the page, click **Plugins**.
3. Click **Add New**.
4. Click **Upload**.
5. Click the **Browse…** button and locate the **paypal-dg-subscriptions.zip** file.
6. Click **Install Now**.
7. Click **Activate Plugin**.

MAC OS X USERS

1. Locate the **paypal-dg-subscriptions.zip** file and decompress it by double-clicking on it.
2. Click on the **paypal-dg-subscriptions** folder.
3. Copy the folder by going to **Edit**->**Copy** (or pressing **Command-C**).
4. Open your **Applications** folder.
5. Open the **XAMPP** folder.
6. Open the **htdocs** folder.
7. Open the **wordpress** folder.
8. Open the **wp-content** folder.
9. Open the **plugins** folder.
10. Paste the folder by going to **Edit**->**Paste** (or pressing **Command-V**).
11. Open your WordPress admin.
12. On the left-hand side of the page, click **Plugins**.
13. Locate the **PayPal Digital Goods Subscriptions** plugin and click the **Activate** link underneath it.

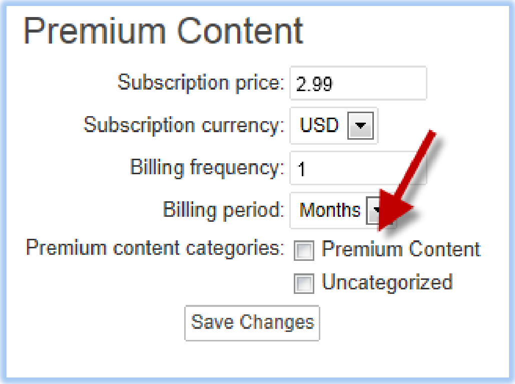
TEST YOUR CODE

1. Verify that a link called **Premium Content** shows up under both the **Users** section and the **Settings** section.



ADD THE PREMIUM CONTENT CATEGORY TO THE LIST OF CATEGORIES REGULATED BY THE PLUGIN.

1. Open your WordPress admin.
2. Under the **Settings** section, click **Premium Content**.
3. Verify that **Premium Content** is listed as one of the checkboxes under the **Premium content categories** section.



Premium Content

Subscription price: 2.99

Subscription currency: USD

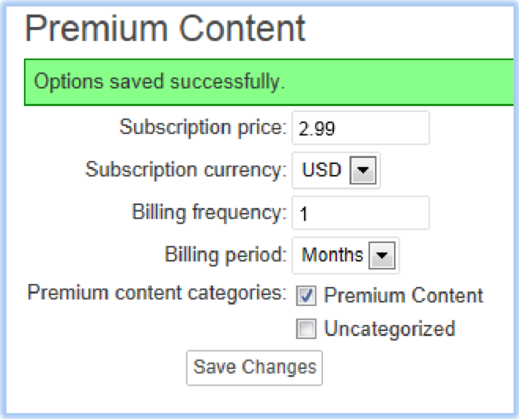
Billing frequency: 1

Billing period: Months

Premium content categories: □ Premium Content

□ Uncategorized

4. Click the **Premium Content** checkbox.
5. Click **Save Changes**. You should see a notice telling you that the changes were saved successfully.



Premium Content

Options saved successfully.

Subscription price: 2.99

Subscription currency: USD

Billing frequency: 1

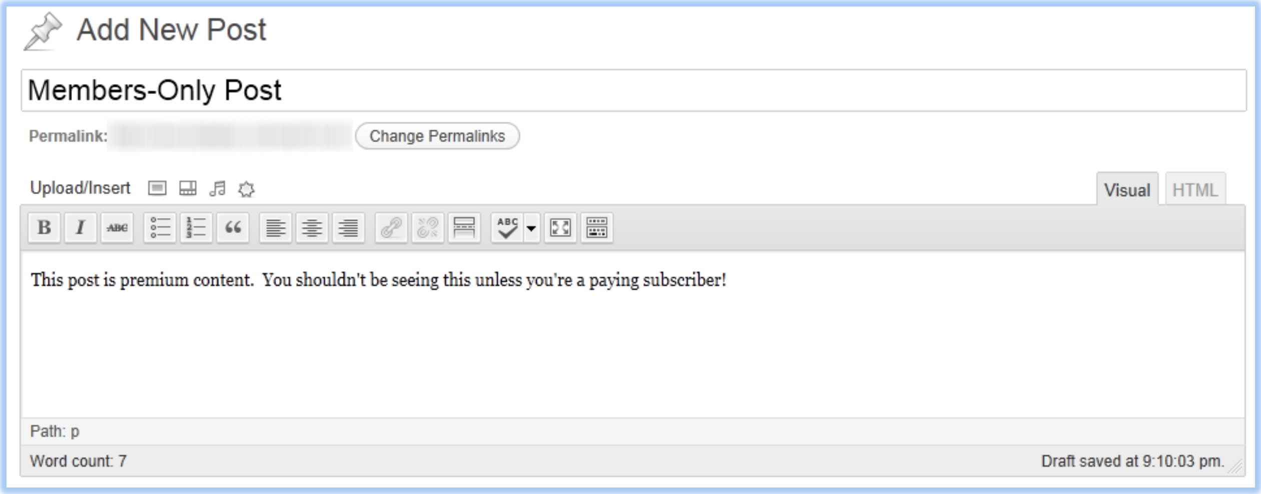
Billing period: Months

Premium content categories: ☑ Premium Content

□ Uncategorized

TEST YOUR CODE

1. Open your WordPress admin.
2. Click **Posts**.
3. Click **Add New**.
4. Enter a title and body for the post.



Add New Post

Members-Only Post

Permalink: [redacted]

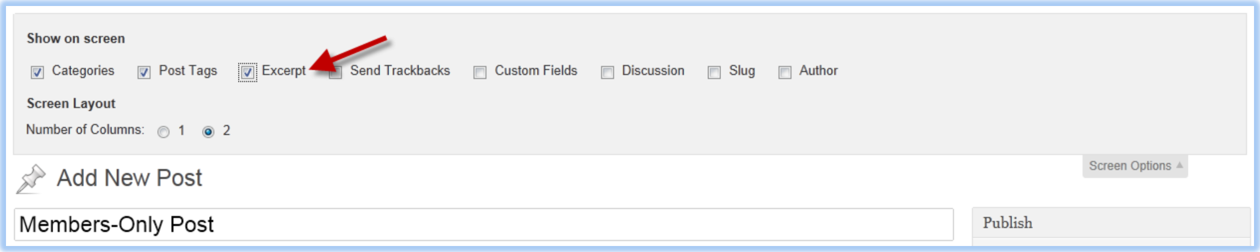
This post is premium content. You shouldn't be seeing this unless you're a paying subscriber!

Path: p

Word count: 7

Draft saved at 9:10:03 pm.

5. Click **Screen Options**.
6. Click the **Excerpt** checkbox.



Show on screen

☑ Categories ☑ Post Tags ☑ Excerpt □ Send Trackbacks □ Custom Fields □ Discussion □ Slug □ Author

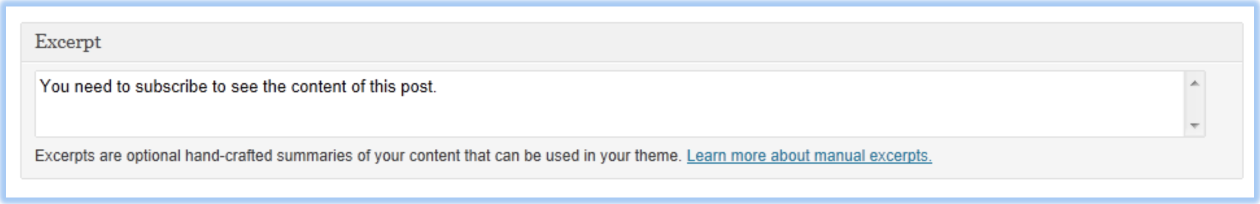
Screen Layout

Number of Columns: ○ 1 ● 2

Add New Post

Members-Only Post

7. Enter an excerpt in the space that appears.



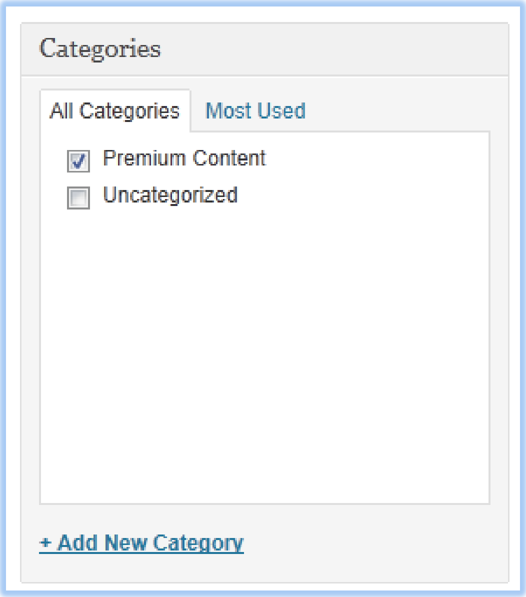
Excerpt

You need to subscribe to see the content of this post.

Excerpts are optional hand-crafted summaries of your content that can be used in your theme. Learn more about manual excerpts.

Note: The plugin shows the excerpt to unsubscribed members. If you do not explicitly provide an excerpt, WordPress will use the first 55 words of the article as the excerpt (with all formatting and HTML stripped). Explicitly providing an excerpt can help protect shorter articles, or articles where you do not want the buyer to see any content before they subscribe.

8. Make sure the **Premium Content** category is checked.

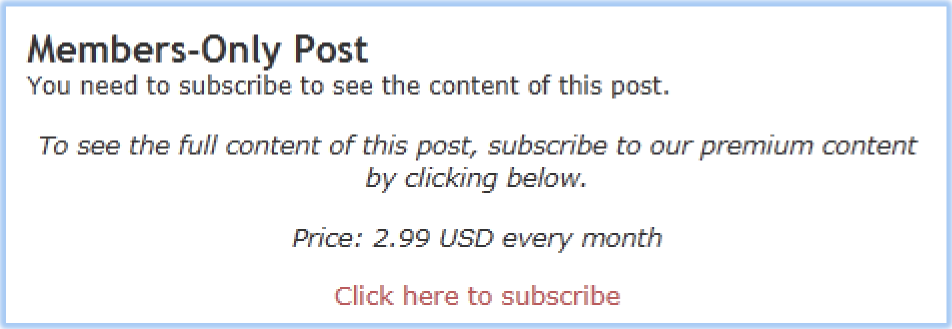


Categories

☑ Premium Content

□ Uncategorized

9. Click the **Publish** button.
10. Click **View post**.
11. Verify that you see the excerpt, and not the full post.



Members-Only Post

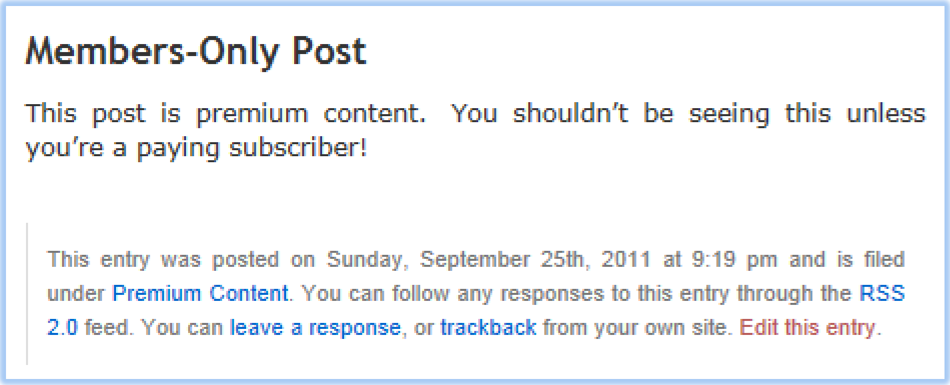
You need to subscribe to see the content of this post.

To see the full content of this post, subscribe to our premium content by clicking below.

Price: 2.99 USD every month

Click here to subscribe

12. Click **Click here to subscribe**. The invite to subscribe should disappear, and the content of the post should be replaced by the full text of the article.

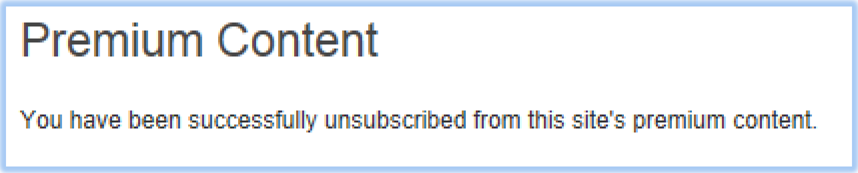


Members-Only Post

This post is premium content. You shouldn't be seeing this unless you're a paying subscriber!

This entry was posted on Sunday, September 25th, 2011 at 9:19 pm and is filed under Premium Content. You can follow any responses to this entry through the RSS 2.0 feed. You can leave a response, or trackback from your own site. Edit this entry.

13. Click **Dashboard**.
14. Under **Users**, click **Premium Content**.
15. Click **Unsubscribe**. You should see a notice informing you that you have been unsubscribed.



Premium Content

You have been successfully unsubscribed from this site's premium content.

DEACTIVATE THE PLUGIN.

1. Open your WordPress admin.
2. Click **Plugins**.
3. Click the **Deactivate** link underneath the PayPal Digital Goods Subscriptions plugin.

OPEN **paypal-dg-subscriptions.php** IN YOUR TEXT EDITOR.

1. Open your text editor.
2. Open the **File** menu and select **Open…**
3. Navigate to the folder where XAMPP is installed. (For Windows users, this will usually be **C:\xampp**.)
4. Open the **htdocs** folder.
5. Navigate to the subfolder where WordPress is installed.
6. Open the **wp-content** folder.
7. Open the **plugins** folder.
8. Open the **paypal-dg-subscriptions** folder.
9. Open the **paypal-dg-subscriptions.php** file.

ADD OPTIONS TO WORDPRESS TO STORE INFORMATION NEEDED BY PAYPAL.

ENTER CODE 1.1

```
function pdgs_install() {
...
    add_option( 'pdgs_billing_period',    'Month' );
    add_option( 'pdgs_api_username',      'test1' );
    add_option( 'pdgs_api_password',      'test2' );
    add_option( 'pdgs_api_signature',     'test3' );
    add_option( 'pdgs_use_sandbox',       true );
    add_option( 'pdgs_subscription_name', 'Members Only Subscription' );
}
```

ADD FIELDS TO THE ADMIN PAGE TO REPRESENT THESE FIELDS.

ENTER CODE 1.2

```
function pdgs_admin() {
...
   pdgs_admin_start_form();
   pdgs_admin_display_textbox( 'API username', 'pdgs_api_username',
      get_option( 'pdgs_api_username' ), 40 );
   pdgs_admin_display_textbox( 'API password', 'pdgs_api_password',
      get_option( 'pdgs_api_password' ), 40 );
   pdgs_admin_display_textbox( 'API signature', 'pdgs_api_signature',
      get_option( 'pdgs_api_signature' ), 60 );
   pdgs_admin_display_textbox( 'Subscription name', 'pdgs_subscription_name',
      get_option( 'pdgs_subscription_name' ), 40 );
   pdgs_admin_display_checkbox( 'Use Sandbox?', 'pdgs_use_sandbox',
      get_option( 'pdgs_use_sandbox' ) );
   pdgs_admin_display_textbox( 'Subscription price', 'pdgs_price', get_option( 'pdgs_price' ) );
```

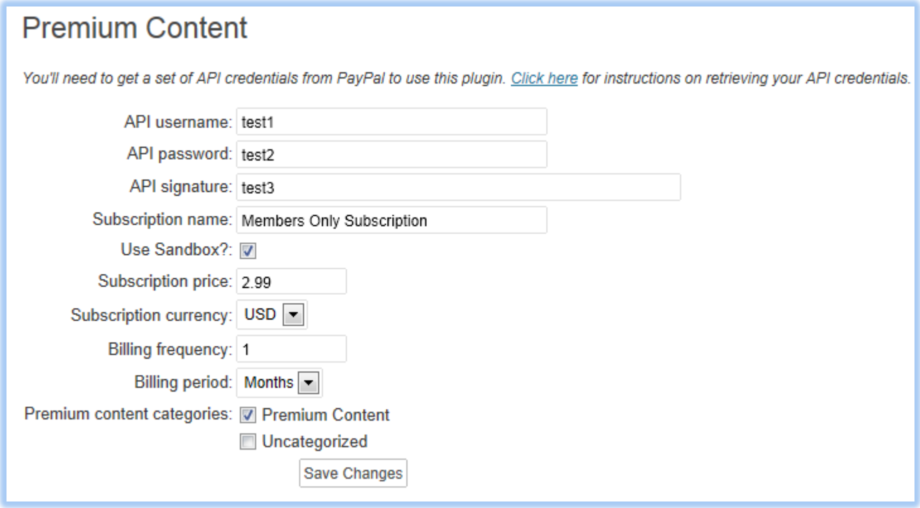
ADD A BLOCK OF TEXT WITH A LINK TO INSTRUCTIONS ON HOW TO RETRIEVE YOUR API CREDENTIALS.

ENTER CODE 1.3

```
function pdgs_admin() {
...
   if( count( $errors ) ) pdgs_admin_display_errors( $errors );

?><p style="font-style: italic;">You'll need to get a set of API credentials from PayPal to use
this plugin.  <a href="http://qwyx.co/apihowto" target="_blank">Click here</a> for instructions
on retrieving your API credentials.</p>
<?php
   pdgs_admin_start_form();
...
}
```

TEST YOUR CODE

1. Open your WordPress admin.
2. Click **Plugins**.
3. Locate the **PayPal Digital Goods Subscriptions** plugin and click the **Activate** link underneath it.
4. Under the **Settings** section, click **Premium Content**.
5. Verify that the **API username**, **API password**, **API signature**, and **Subscription name** text boxes appear, and that they show the default values. Also, verify that the **Use Sandbox?** checkbox appears, and that it is checked.



Premium Content

You'll need to get a set of API credentials from PayPal to use this plugin. Click here for instructions on retrieving your API credentials.

API username: test1
API password: test2
API signature: test3
Subscription name: Members Only Subscription
Use Sandbox?: ☑
Subscription price: 2.99
Subscription currency: USD
Billing frequency: 1
Billing period: Months
Premium content categories: ☑ Premium Content
□ Uncategorized

ADD VARIABLES TO HOLD THE POSTED FORM DATA.

ENTER CODE 1.4

```
function pdgs_admin() {
...
    if( isset( $_POST[ 'pdgs_update_config' ] ) &&
        ( 'Y' == $_POST[ 'pdgs_update_config' ] ) ) {
        $api_username  = trim( $_POST[ 'pdgs_api_username'      ] );
        $api_password  = trim( $_POST[ 'pdgs_api_password'      ] );
        $api_signature = trim( $_POST[ 'pdgs_api_signature'     ] );
        $subscr_name   = trim( $_POST[ 'pdgs_subscription_name' ] );
        if( isset( $_POST[ 'pdgs_use_sandbox' ] ) )
            $use_sandbox = true;
        else
            $use_sandbox = false;

        if( isset( $_POST[ 'pdgs_cats' ] ) )
...
}
```

VALIDATE THE DATA THAT WAS ENTERED.

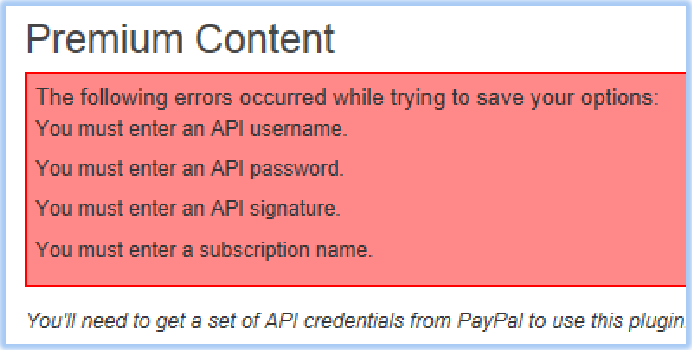
For now, we'll just validate that something was entered. Later, we'll go back and do a more thorough validation that ensures that we can run API calls with those credentials.

ENTER CODE 1.5

```
function pdgs_admin() {
...
        $period         = trim( $_POST[ $pdgs_period_key        ] );

        if( !strlen( $api_username ) )  $errors[] = 'You must enter an API username.';
        if( !strlen( $api_password ) )  $errors[] = 'You must enter an API password.';
        if( !strlen( $api_signature ) ) $errors[] = 'You must enter an API signature.';
        if( !strlen( $subscr_name ) )   $errors[] = 'You must enter a subscription name.';
        if( !strlen( $price ) || !is_numeric( $price ) )
```

TEST YOUR CODE

1. Log in to your WordPress admin.
2. Under **Settings**, click **Premium Content**.
3. Delete the API username, API password, API signature, and subscription name.
4. Click **Save Changes**. You should receive an error indicating that you must enter each piece of information:



Premium Content

The following errors occurred while trying to save your options:
You must enter an API username.

You must enter an API password.

You must enter an API signature.

You must enter a subscription name.

You'll need to get a set of API credentials from PayPal to use this plugin

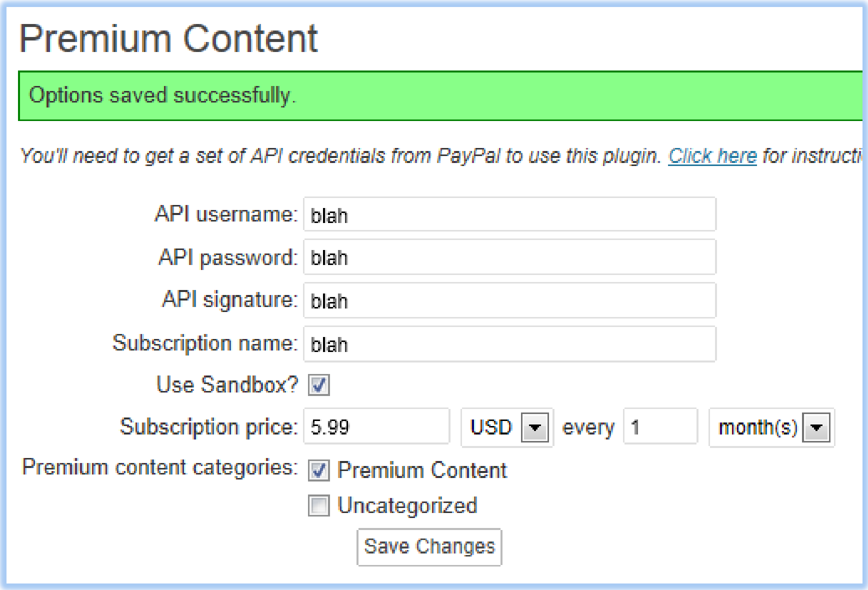
UPDATE THE OPTIONS WITH THE SUBMITTED VALUES.

ENTER CODE 1.6

```
function pdgs_admin() {
...
       if( !count($errors) ) {
          update_option( 'pdgs_api_username',      $api_username  );
          update_option( 'pdgs_api_password',      $api_password  );
          update_option( 'pdgs_api_signature',     $api_signature );
          update_option( 'pdgs_use_sandbox',       $use_sandbox   );
          update_option( 'pdgs_subscription_name', $subscr_name   );
          update_option( 'pdgs_price',             $price         );
...
}
```

TEST YOUR CODE

1. Log in to your WordPress admin.
2. Under Settings, click Premium Content.
3. Change the values for **API username**, **API password**, **API signature**, and **Subscription name**.
4. Click **Save Changes**. You should receive a notice telling you that the options were saved successfully. The new values you entered should show after saving.



Premium Content

Options saved successfully.

You'll need to get a set of API credentials from PayPal to use this plugin. Click here for instructi

API username: blah

API password: blah

API signature: blah

Subscription name: blah

Use Sandbox? ☑

Subscription price: 5.99 USD every 1 month(s)

Premium content categories: ☑ Premium Content

☐ Uncategorized

Save Changes

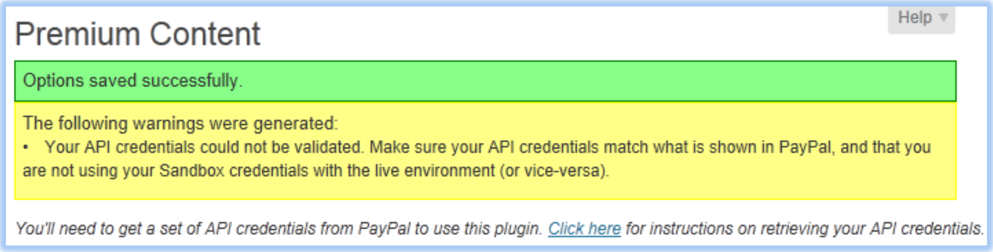
VALIDATE THE CREDENTIALS BY RUNNING A GetPalDetails CALL TO PAYPAL.

ENTER CODE 1.7

```
function pdgs_admin()
...
          $success = true;

          $req = array(
              'METHOD'  => 'GetPalDetails',
              'VERSION' => '82.0'
          );

          $resp = pdgs_run_api_call( $req );
          if( ( 'Success' != $resp[ 'ACK' ] ) &&
              ( 'SuccessWithWarning' != $resp[ 'ACK' ] ) )
              $warnings[] = 'Your API credentials could not be validated.  Make sure your API credentials match what is shown in PayPal, and that you are not using your Sandbox credentials with the live environment (or vice-versa).';
          }
...
}
```

TEST YOUR CODE

1. Log in to your WordPress admin.
2. Under **Settings**, click **Premium Content**.
3. Enter junk text in the **API username**, **API password**, and **API signature** fields.
4. Click **Save Changes**. You should see a warning message indicating that your credentials could not be validated.



Premium Content

Options saved successfully.

The following warnings were generated:

- Your API credentials could not be validated. Make sure your API credentials match what is shown in PayPal, and that you are not using your Sandbox credentials with the live environment (or vice-versa).

You'll need to get a set of API credentials from PayPal to use this plugin. Click here for instructions on retrieving your API credentials.

5. Retrieve your API credentials from the PayPal Sandbox and enter them on the page.
6. Click **Save Changes**. The warning message should not appear.

LAB 2 – PREPARE THE PAGE FOR THE DIGITAL GOODS EXPERIENCE

REMOVE THE **CLICK HERE TO SUBSCRIBE** LINK.

ENTER CODE 2.1

```
function pdgs_display_signup_invite( $excerpt ) {
...
<p style="font-style: italic; text-align: center;">Price: $price</p>
~~<p style="text-align: center;"><a href="javascript:void(0)" onClick="getPremiumContent()">Click
here to subscribe</a></p>~~
</div>
...
}
```

REMOVE THE `getPremiumContent` JAVASCRIPT FUNCTION.

ENTER CODE 2.2

```
function pdgs_display_signup_invite( $excerpt ) {
...
</div>
~~<script type="text/javascript">~~
~~function getPremiumContent() {~~
~~    jQuery.ajax( {~~
~~        url: "$ajaxurl?action=pdgs_finish&pdgs_post_id=$the_id",~~
~~        success: function( data, textStatus, jqXHR ) {~~
~~            jQuery( "#pdgs_content" ).html( data );~~
~~            jQuery( "#pdgs_error" ).hide();~~
~~            jQuery( "#pdgs_form" ).hide();~~
~~        },~~
~~        error: function( jqXHR, textStatus, errorThrown ) {~~
~~            jQuery( "#pdgs_error" ).html( "An error occurred while trying to activate your
subscription.  Please try again later." );~~
~~            jQuery( "#pdgs_error" ).show();~~
~~        }~~
~~    } );~~
~~}~~
~~</script>~~
EOF;
...
}
```

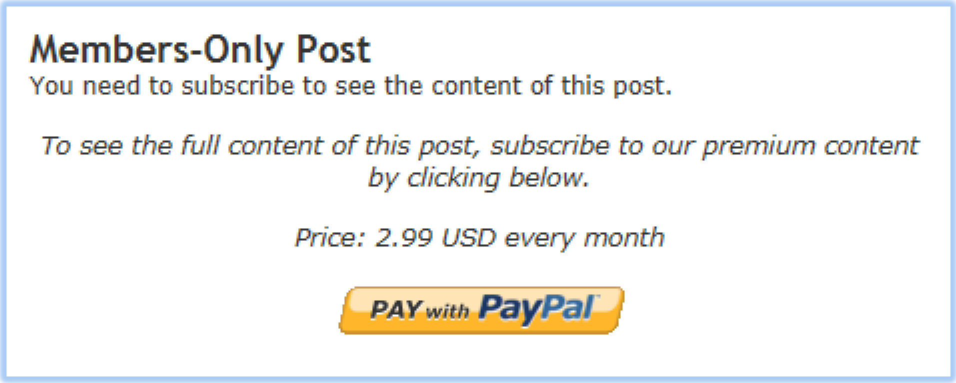
ADD THE DIGITAL GOODS HTML FORM.

ENTER CODE 2.3

```
function pdgs_display_signup_invite( $excerpt ) {
...
<p style="font-style: italic; text-align: center;">Price: $price</p>
<form action="$ajaxurl" method="POST">
<input type="hidden" name="action" value="pdgs_setec" />
<input type="hidden" name="pdgs_post_id" value="$the_id" />
<input type="image" src="https://www.paypal.com/en_US/i/btn/btn_dg_pay_w_paypal.gif"
id="pdgs_btn" />
</form>
</div>
...
}
```

TEST YOUR CODE

1. Navigate to the sample post you created in Lab 1.
2. You should see the **Pay with PayPal** button displayed underneath the post.



Members-Only Post

You need to subscribe to see the content of this post.

To see the full content of this post, subscribe to our premium content by clicking below.

Price: 2.99 USD every month

ADD A REFERENCE TO THE PAYPAL DIGITAL GOODS JAVASCRIPT FILE.

ENTER CODE 2.4

```
function pdgs_display_signup_invite( $excerpt ) {
...
</form>
</div>
<script type="text/javascript" src="https://www.paypalobjects.com/js/external/dg.js"></script>
EOF;
...
}
```

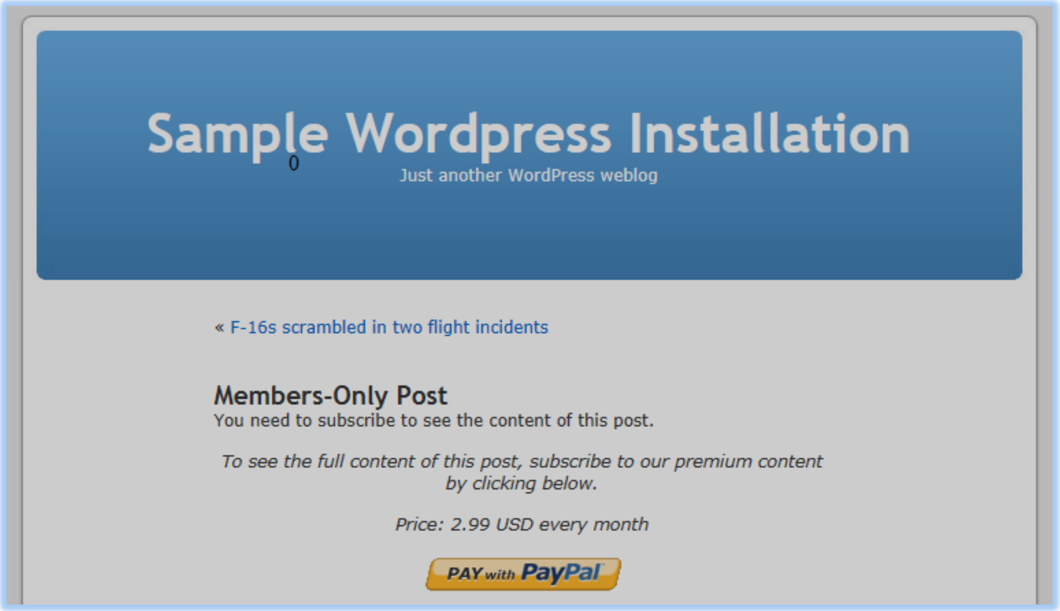
CONSTRUCT THE DGFlow OBJECT.

ENTER CODE 2.5

```
function pdgs_display_signup_invite( $excerpt ) {
...
<script type="text/javascript" src="https://www.paypalobjects.com/js/external/dg.js"></script>
<script type="text/javascript">
var pdgs_dg = new PAYPAL.apps.DGFlow( { trigger: "pdgs_btn" } );
</script>
EOF;
...
}
```

TEST YOUR CODE

1. Navigate to the sample post you created in Lab 1.
2. Click the **Pay with PayPal** button. You should see a lightbox displayed on top of the page. You will also see a **0** displayed on the page.



Sample Wordpress Installation

0

Just another WordPress weblog

« F-16s scrambled in two flight incidents

Members-Only Post

You need to subscribe to see the content of this post.

To see the full content of this post, subscribe to our premium content by clicking below.

Price: 2.99 USD every month

Note: To exit the lightbox, refresh the page.

ADD A FUNCTION TO DISPLAY ERROR MESSAGES AND CLOSE THE LIGHTBOX.

ENTER CODE 2.6

```
function pdgs_abort( $errorcode, $shortmessage, $longmessage ) {
?><html>
<body>
<script type="text/javascript">
top.jQuery( "#pdgs_error" ).html( "Sorry, an error occurred while trying to complete your
payment.  Please try again later.<br /><br />Error code: <?php echo addslashes( $errorcode );
?><br />Short message: <?php echo addslashes( $shortmessage ); ?><br />Long message: <?php echo
addslashes( $longmessage ); ?>" );
top.jQuery( "#pdgs_error" ).show();
top.pdgs_dg.closeFlow();
</script>
</body>
</html>
<?php
    die();
}
```

LAB 3 – ADD THE SETEXPRESSCHECKOUT CALL

ADD A FUNCTION TO RUN A SetExpressCheckout CALL.

The pdgs_run_api_call function has been provided to you to facilitate running API calls to PayPal.

ENTER CODE 3.1

```
function pdgs_setec() {

   $post_id     = $_POST[ 'pdgs_post_id' ];
   $price       = get_option( 'pdgs_price' );
   $currency    = get_option( 'pdgs_currency' );
   $subscr_name = get_option( 'pdgs_subscription_name' );
   $returnurl   = admin_url( 'admin-ajax.php?action=pdgs_finish&pdgs_post_id=' . $post_id );
   $cancelurl   = admin_url( 'admin-ajax.php?action=pdgs_cancel' );

   $req = array(
      'VERSION'                          => '82.0',
      'METHOD'                           => 'SetExpressCheckout',
      'RETURNURL'                        => $returnurl,
      'CANCELURL'                        => $cancelurl,
      'NOSHIPPING'                       => '1',
      'L_BILLINGTYPE0'                   => 'RecurringPayments',
      'L_BILLINGAGREEMENTDESCRIPTION0'   => $subscr_name,
      'PAYMENTREQUEST_0_AMT'             => $price,
      'PAYMENTREQUEST_0_CURRENCYCODE'    => $currency,
      'PAYMENTREQUEST_0_ITEMAMT'         => $price,
      'PAYMENTREQUEST_0_PAYMENTACTION'   => 'Sale',
      'L_PAYMENTREQUEST_0_NAME0'         => $subscr_name,
      'L_PAYMENTREQUEST_0_AMT0'          => $price,
      'L_PAYMENTREQUEST_0_ITEMCATEGORY0' => 'Digital',
      'L_PAYMENTREQUEST_0_QTY0'          => '1'
   );

   $response = pdgs_run_api_call( $req );

   if( ( 'Success' == $response[ 'ACK' ] ) ||
      ( 'SuccessWithWarning' == $response[ 'ACK' ] ) ) {
      $token = $response[ 'TOKEN' ];
      if( get_option( 'pdgs_use_sandbox' ) )
         header( 'Location: https://www.sandbox.paypal.com/incontext?token=' . $token );
      else
         header( 'Location: https://www.paypal.com/incontext?token=' . $token );
      die();
   } else {
      pdgs_abort( $response[ 'L_ERRORCODE0' ], $response[ 'L_SHORTMESSAGE0' ],
         $response[ 'L_LONGMESSAGE0' ] );
   }
}
```

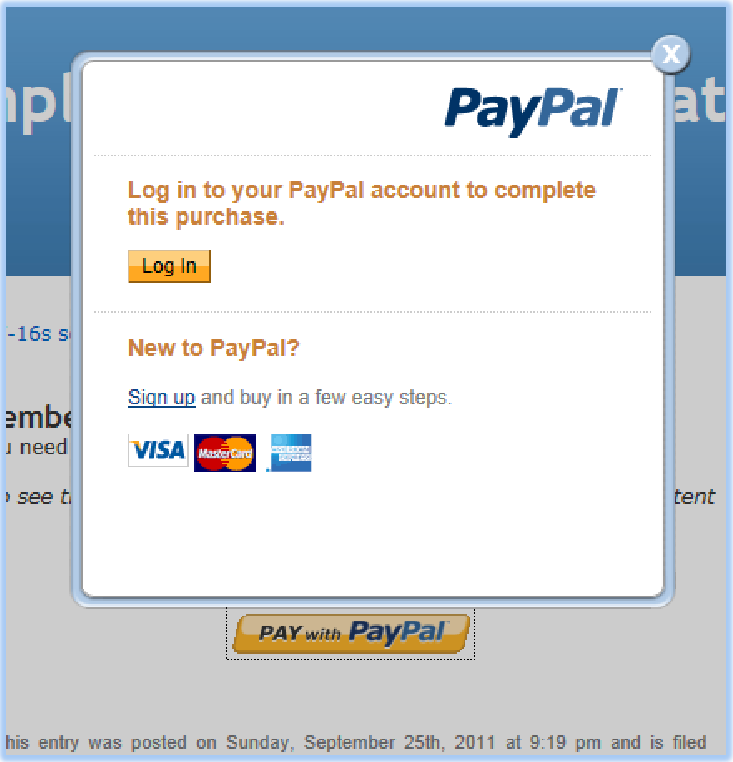
ADD AN AJAX ACTION FOR pdgs_setec.

ENTER CODE 3.2

```
add_action( 'wp_ajax_pdgs_setec', 'pdgs_setec' );
```

TEST YOUR CODE

1. Navigate to the sample post you created in Lab 1.
2. Click the **Pay with PayPal** button. You should see a lightbox displayed on top of the page. The PayPal checkout page should show in the lightbox.



Log in to your PayPal account to complete this purchase.

New to PayPal?

Sign up and buy in a few easy steps.

his entry was posted on Sunday, September 25th, 2011 at 9:19 pm and is filed

Note: To exit the lightbox, refresh the page.

LAB 4 – HANDLE THE RETURN FROM PAYPAL

ADD A FUNCTION TO HANDLE THE BUYER CANCELLING THE PAYPAL CHECKOUT.

ENTER CODE 4.1

```
function pdgs_cancel() {
?><html>
<body>
<script type="text/javascript">
top.jQuery( "#pdgs_error" ).hide();
top.pdgs_dg.closeFlow();
</script>
</body>
</html>
<?php
    die();
}
```

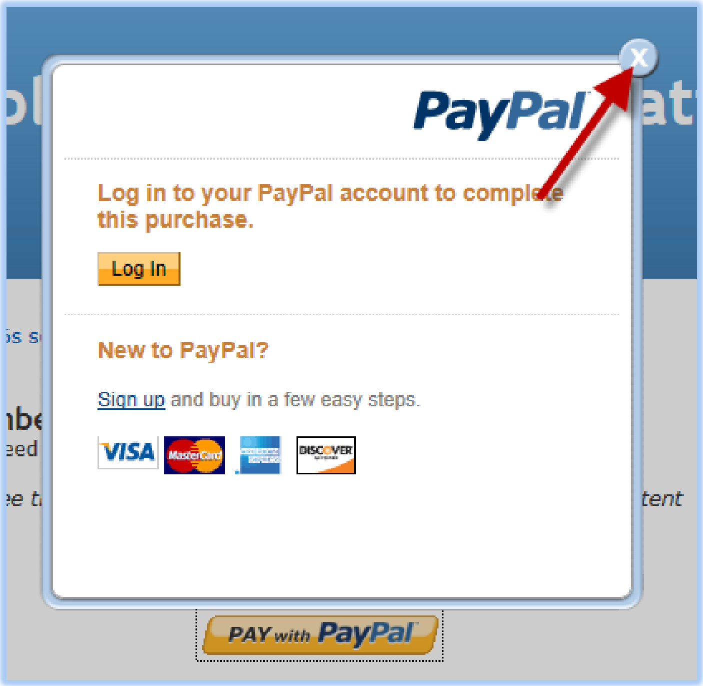
ADD AN AJAX ACTION TO CALL `pdgs_cancel`.

ENTER CODE 4.2

```
add_action( 'wp_ajax_pdgs_cancel', 'pdgs_cancel' );
```

TEST YOUR CODE

1. Navigate to the sample post you created in Lab 1.
2. Click the **Pay with PayPal** button.
3. Click the **X** in the corner of the PayPal checkout page.



Log in to your PayPal account to complete this purchase.

New to PayPal?

Sign up and buy in a few easy steps.

The lightbox should close with no changes to the original page.

ADD A FUNCTION TO RUN A DoExpressCheckoutPayment API CALL.

ENTER CODE 4.3

```
function pdgs_run_doec_call() {

    $price     = get_option( 'pdgs_price' );
    $currency  = get_option( 'pdgs_currency' );
    $item_name = get_option( 'pdgs_subscription_name' );
    $token     = $_GET[ 'token' ];
    $payerID   = $_GET[ 'PayerID' ];

    $req = array(
        'VERSION'                          => '82.0',
        'METHOD'                           => 'DoExpressCheckoutPayment',
        'TOKEN'                            => $token,
        'PAYERID'                          => $payerID,
        'PAYMENTREQUEST_0_PAYMENTACTION'   => 'Sale',
        'PAYMENTREQUEST_0_AMT'             => $price,
        'PAYMENTREQUEST_0_CURRENCYCODE'    => $currency,
        'PAYMENTREQUEST_0_ITEMAMT'         => $price,
        'L_PAYMENTREQUEST_0_NAME0'         => $item_name,
        'L_PAYMENTREQUEST_0_AMT0'          => $price,
        'L_PAYMENTREQUEST_0_ITEMCATEGORY0' => 'Digital',
        'L_PAYMENTREQUEST_0_QTY0'          => '1'
    );

    $response = pdgs_run_api_call( $req );

    if( ( 'Success' == $response[ 'ACK' ] ) ||
        ( 'SuccessWithWarning' == $response[ 'ACK' ] ) ) {
        return array(
            'transactionid' => $response [ 'PAYMENTINFO_0_TRANSACTIONID' ],
            'success'       => true
        );
    } else {
        return array(
            'error'        => $response[ 'L_ERRORCODE0'    ],
            'shortmessage' => $response[ 'L_SHORTMESSAGE0' ],
            'longmessage'  => $response[ 'L_LONGMESSAGE0'  ],
            'success'      => false
        );
    }

}
```

ADD A FUNCTION TO RUN A `CreateRecurringPaymentsProfile` API CALL.

ENTER CODE 4.4

```
function pdgs_run_createrp_call() {

   $price       = get_option( 'pdgs_price' );
   $currency    = get_option( 'pdgs_currency' );
   $subscr_name = get_option( 'pdgs_subscription_name' );
   $token       = $_GET[ 'token' ];
   $frequency   = get_option( 'pdgs_billing_frequency' );
   $period      = get_option( 'pdgs_billing_period' );
   $startdate   = pdgs_add_time( $period, $frequency );

   $req = array(
      'VERSION'          => '82.0',
      'METHOD'           => 'CreateRecurringPaymentsProfile',
      'TOKEN'            => $token,
      'PROFILESTARTDATE' => $startdate,
      'DESC'             => $subscr_name,
      'BILLINGPERIOD'    => $period,
      'BILLINGFREQUENCY' => $frequency,
      'AMT'              => $price,
      'CURRENCYCODE'     => $currency
   );

   $response = pdgs_run_api_call( $req );

   if( ( 'Success' == $response[ 'ACK' ] ) ||
      ( 'SuccessWithWarning' == $response[ 'ACK' ] ) ) {
      return array(
         'profileid' => $response[ 'PROFILEID' ],
         'success'   => true
      );
   } else {
      return array(
         'error'        => $response[ 'L_ERRORCODE0'    ],
         'shortmessage' => $response[ 'L_SHORTMESSAGE0' ],
         'longmessage'  => $response[ 'L_LONGMESSAGE0'  ],
         'success'      => false
      );
   }

}
```

ADD A FUNCTION TO RUN A `RefundTransaction` CALL.

ENTER CODE 4.5

```
function pdgs_run_refund_call( $trxid ) {

   $req = array(
      'VERSION'       => '82.0',
      'METHOD'        => 'RefundTransaction',
      'TRANSACTIONID' => $trxid,
      'REFUNDTYPE'    => 'Full'
   );

   pdgs_run_api_call( $req );

}
```

MODIFY `pdgs_finish` TO RUN THE TRANSACTION AND CREATE THE SUBSCRIPTION.

ENTER CODE 4.6

```
function pdgs_finish() {

   global $wpdb;

   $post_id = $_GET['pdgs_post_id'];

   $trx = pdgs_run_doec_call();
   if( !$trx[ 'success' ] ) {
      pdgs_abort( $trx[ 'error' ], $trx[ 'shortmessage' ], $trx[ 'longmessage' ] );
   }

   $profile = pdgs_run_createrp_call();
   if( !$profile[ 'success' ] ) {
      pdgs_run_refund_call( $trx[ 'transactionid' ] );
      pdgs_abort( $profile[ 'error' ], $profile[ 'shortmessage' ], $profile[ 'longmessage' ] );
   }

~~   $profile_id  = 'filler';~~
   $profile_id = $profile[ 'profileid' ];

   $tblname = $wpdb->prefix . 'pdgs_subscribed_users';
...
}
```

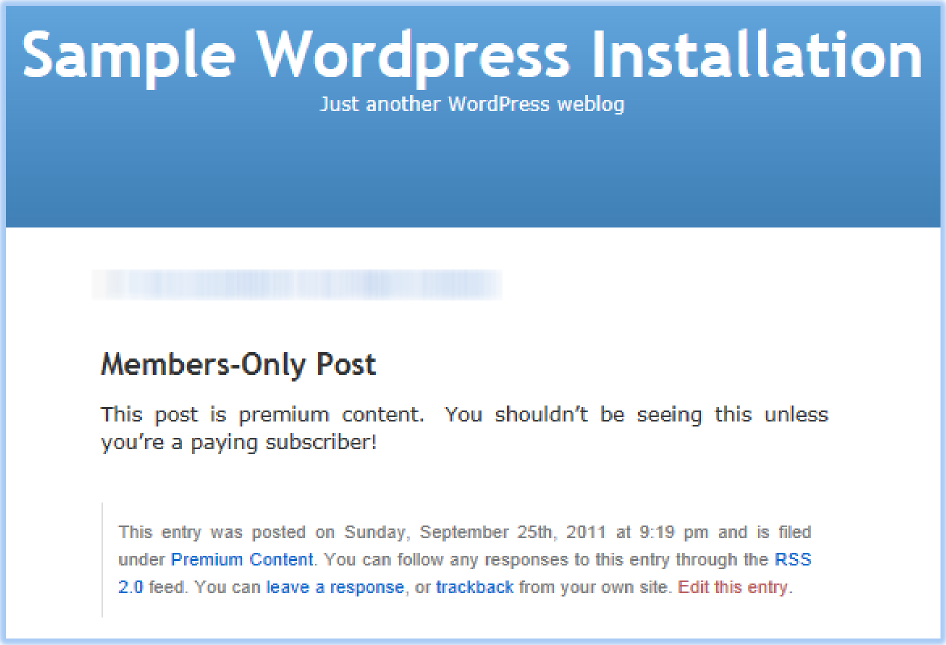
MODIFY pdgs_display_final_content TO UPDATE THE CONTENT ON THE PARENT PAGE AND CLOSE THE LIGHTBOX.

ENTER CODE 4.7

```
function pdgs_display_final_content( $content ) {

   $c = addcslashes( pdgs_get_rendered_content( $post_id ), "\r\n'\"" );

?><html>
<body>
<script type="text/javascript">
top.jQuery( "#pdgs_content" ).html( "<?php echo $c; ?>" );
top.jQuery( "#pdgs_error" ).hide();
top.jQuery( "#pdgs_form" ).hide();
top.pdgs_dg.closeFlow();
</script>
</body>
</html>
<?php

}
```

TEST YOUR CODE

1. Navigate to the sample post you created in Lab 1.
2. Click the **Pay with PayPal** button.
3. When the PayPal payment page appears, click **Log In**.
4. Enter the email address and password for your buyer account on the PayPal Sandbox.
5. Click **Log In**.
6. Click **Agree and Pay Now**. After a moment, the lightbox should close, and the parent page should change to reflect the full content of the post.



Sample Wordpress Installation

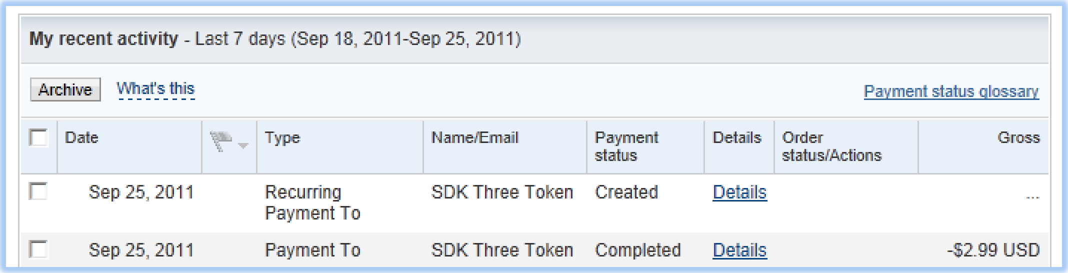
Just another WordPress weblog

Members-Only Post

This post is premium content. You shouldn't be seeing this unless you're a paying subscriber!

This entry was posted on Sunday, September 25th, 2011 at 9:19 pm and is filed under Premium Content. You can follow any responses to this entry through the RSS 2.0 feed. You can leave a response, or trackback from your own site. Edit this entry.

7. Log in to your buyer account on the PayPal Sandbox. In the **My recent activity** box, you should see two transactions – a subscription and a one-time purchase.



My recent activity - Last 7 days (Sep 18, 2011-Sep 25, 2011)

□	Date		Type	Name/Email	Payment status	Details	Order status/Actions	Gross
□	Sep 25, 2011		Recurring Payment To	SDK Three Token	Created	Details		...
□	Sep 25, 2011		Payment To	SDK Three Token	Completed	Details		-$2.99 USD

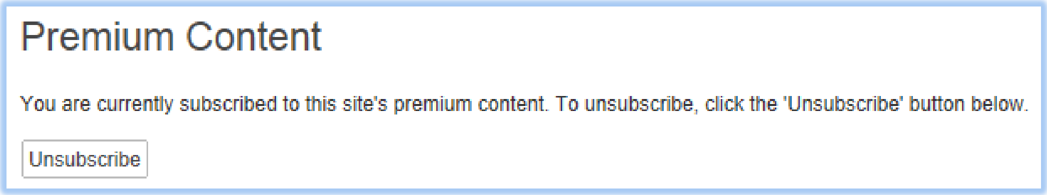
MODIFY THE `pdgs_unsubscribe_user` FUNCTION TO MAKE A `ManageRecurringPaymentsProfileStatus` API CALL TO PAYPAL.

ENTER CODE 5.1

```
function pdgs_unsubscribe_user( $user_id, $profile_id ) {

    global $wpdb;

    $req = array(
        'VERSION'   => '82.0',
        'METHOD'    => 'ManageRecurringPaymentsProfileStatus',
        'ACTION'    => 'Cancel',
        'PROFILEID' => $profile_id
    );

    $response = pdgs_run_api_call( $req );

    if( ( 'Success' != $response[ 'ACK' ] ) &&
        ( 'SuccessWithWarning' != $response[ 'ACK' ] ) ) {
        echo 'Sorry, there was an error trying to cancel your subscription at PayPal.  You have
<strong>not</strong> been unsubscribed.  You should contact the site administrator for
assistance.<br /><br />Error code: ' . $resp[ 'L_ERRORCODE0' ] . '<br />Short message: ' .
$resp[ 'L_SHORTMESSAGE0' ] . '<br />Long message: ' . $resp[ 'L_LONGMESSAGE0' ];
        return;
    }

    $tblname = $wpdb->prefix . 'pdgs_subscribed_users';
    $sql = 'DELETE FROM ' . $tblname . ' WHERE user_id=' . $user_id;
    $wpdb->query( $sql );
    echo 'You have been successfully unsubscribed from this site\'s premium content.';

}
```

TEST YOUR CODE

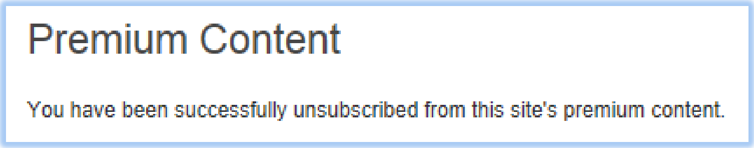
1. Log in to your WordPress admin.
2. Under **Users**, click **Premium Content**. You should see an **Unsubscribe** button.



Premium Content

You are currently subscribed to this site's premium content. To unsubscribe, click the 'Unsubscribe' button below.

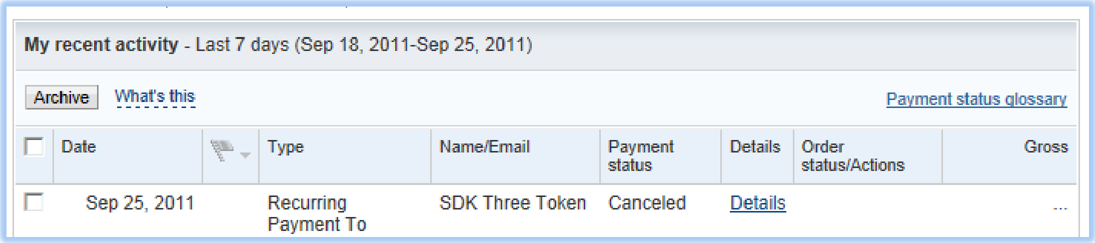
3. Click the **Unsubscribe** button. You should see a notice informing you that you were successfully unsubscribed.



Premium Content

You have been successfully unsubscribed from this site's premium content.

4. Log in to your buyer account on the PayPal Sandbox. In the **My recent activity** box, you should see a transaction indicating that your subscription has been cancelled.



My recent activity - Last 7 days (Sep 18, 2011-Sep 25, 2011)

□	Date		Type	Name/Email	Payment status	Details	Order status/Actions	Gross
□	Sep 25, 2011		Recurring Payment To	SDK Three Token	Canceled	Details		...